

## Derwent Record

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**Derwent Title:** Hydrophilising agent for synthetic fibres, esp. acrylonitrile - contains polymeric pyrrolidinium salt, ethoxylated betaine cpd and ethoxylated sulphobetaine sulphinate or sulphonate

**Original Title:** ☒ [DE4316666C1](#): Hydrophilierungsmittel

**Assignee:** MAERKISCHE FASER PREMnitz AG Non-standard company  
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**Accession/Update:** 1995-007368 / 199502

**IPC Code:** D06M 15/356 ; C04B 16/06 ; D06M 13/244 ; D06M 15/53 ;

**Derwent Classes:** A87; E16; F06; L02; A14;

**Manual Codes:** A04-B(Others) , A04-D02B(Fibres, textiles) , A08-S02 (Solvents; swelling agents) , A08-S08(Absorption agents; repellance agents) , A10-E01(General) , A12-S05S(Antistatic, surfactant, softener or lubricant treatments) , E10-A09B8(no ring(s) present) , E10-A22D(No Aromatic ring - with acid (derivative)) , F01-D02(Acrylic and modacrylic fibres) , F03-D04(Fabric structures designed for reinforcement of solid materials) , L02-D05(Reinforced and pre-stressed concretes)

**Derwent Abstract:** (DE4316666C) A hydrophilising agent (I) for the treatment of synthetic fibres, esp. reinforcing and process fibres based on polyacrylonitrile (PAN) for use in hydraulic binders, comprises (A) 4-12 wt.% polymeric pyrrolidinium salt, (B) 4-13 wt.% ethoxylated alkyl- or dialkyl-ammonium betaine and (C) 4-7 wt.% alkyl-bis-(polyoxyethylene)-ammonium-sulphobetaine sulphinate and/or sulphonate as main components in the mole ratio 1:1:1, together with (D) 1-5 wt.% non-ionic surfactant, (E) 5-10 wt.% low-mol. wt. alcohol or diol, (F) 0.05-2 wt.% foam inhibitor and (G) 0.05-2 wt.% auxiliary film former, made up to 100 wt.% with water.  
**Use** - Used esp. for the modification of PAN fibres for use as reinforcement in building materials, friction linings, etc.  
**Advantage** - Enables the hydrophilic properties of synthetic fibre to be modified independently of the intended matrix (cement, etc.). The hydrophilising film is deposited from dil. aq. soln. as a complex which can then form a silicate film which also protects the fibre surface from the alkali in the binder.

Dwg.0/0

**Family:** PDF Patent Pub. Date Derwent Update Pages Language IPC Code  
☒ [DE4316666C1](#) \* 1994-12-08 199502 6 German D06M 15/356

Local appl.: [DE1993004316666](#) Filed:1993-05-13 (93DE-4316666)

[INPADOC](#) [Show legal status actions](#)  
 Legal Status:

[First Claim:](#) [Show all claims](#) 1. Hydrophilierungsmittel zur Ausrüstung von Synthesefasern für technische Einsatzgebiete, insbesondere von Armierungs- und Prozeßfasern auf Acrylnitrilbasis, für den Einsatz in hydraulischen Bindern, bestehend aus 4 bis 12 Gew.-% eines polymeren Pyrrolidiniumsalzes, 4 bis 13 Gew.-% eines oxethylierten Alkyl- oder Dialkylammoniumbetains sowie 4 bis 7 Gew.-% eines Alkyl-bis(polyoxyethylen)-ammoniumsulfobetain-sulfonats und/oder -sulfobetain-sulfonats als Hauptkomponenten und 1 bis 5 Gew.-% eines nichtionischen Tensids, 5 bis 10 Gew.-% eines niedermolekularen Alkohols oder Diols, 0,05 bis 2 Gew.-% eines Schauminhibitors, 0,05 bis 2 Gew.-% eines unterstützenden Filmbildners und Ausgleich auf 100 Gew.-% mit Wasser, wobei die Hauptkomponenten im Molverhältnis 1 : 1 : 1 vorliegen.

[Priority Number:](#)

Application Number	Filed	Original Title
<a href="#">DE1993004316666</a>	1993-05-13	HYDROPHILIERUNGSMITTEL

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 Accessions:

Accession Number	Type	Derwent Update	Derwent Title
C1995-002685	C		
1 item found			

[Title Terms:](#) HYDROPHILIC AGENT SYNTHETIC FIBRE ACRYLONITRILE CONTAIN POLYMERISE PYRROLIDINIUM SALT ETHOXYLATION BETAIN COMPOUND ETHOXYLATION SULPHINATE SULPHONATE

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